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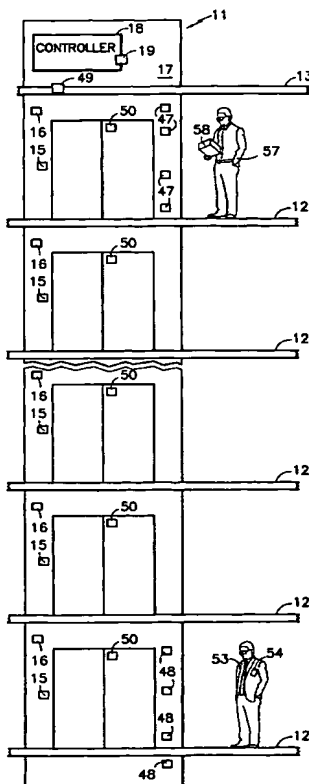
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[Continued on next page]

(54) Title: **ELEVATOR WIRELESS COMMUNICATION INFRASTRUCTURE USING PICONET MODULES**



(57) Abstract: An elevator system has on each floor hall call buttons that are interconnected with piconet modules (15), such as modules conforming to BLUETOOTHTM specifications; similar piconet modules (16) may be associated with hall fixtures such as lanterns and gongs; similar piconet modules (50) may be associated with hoistway doors, on each floor, so as to form a wireless communication system with a similar piconet module (19) at the controller (18); and a piconet module (40) may be associated with the car operating panel. A module (43) may be interconnected with the car door lock switch; a module (44) may be interconnected with a safety switch; modules (48) and (49) may be interconnected with lower and upper limit switches; and a module (49) may be interconnected with an overspeed detector, so as to form a safety chain. A prospective passenger (53) may carry a portable device with a piconet module (54) to request elevator service and receive acknowledgment, and maintenance personnel (58) may use a personal digital assistant having a piconet module (58) therein to acquire current and historical information about the elevator and to issue executable commands to the elevator system.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B66B 5/02, 1/50

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 187/247,287,289,391,393,316,413,414,900; 340/505,507,518,521,522

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,647,585 B1 (GOZZO et al) 22 October 2002 (22.10.2002), see entire document.	1-11
Y	US 6,481,531 B (NAGURA et al) 19 November 2002 (19.11.2002), see entire document.	1-11
A	US 6,173,814 B1 (HERKEL et al) 16 January 2001 (16.01.2001), see figure 1.	1-11
A	US 5,708,416 A (ZAHARIA et al) 13 January 1998 (13.01.1998), see figures 2,4.	1-11
A	US 3,203,506 A (CUMMINGS) 31 August 1965 (31.08.1965), see entire document.	1-11

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